

The medication adherence rate scores of the patients at academic hospital (4.35 ± 1.31), corporate hospital (4.38 ± 1.10) and government hospital (4.16 ± 1.28). **CONCLUSIONS:** The overall mean medication adherence rate score of the patients is 4.34 ± 1.23 and there is no significant difference in mean scores among hemodialysis centres ($p = 0.722$). The health care professionals need to educate the patients about their disease state and importance of adherence to prescribed medications.

PUK16

CONCEPTUAL FRAMEWORK IN INTERSTITIAL CYSTITIS / BLADDER PAIN SYNDROME

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OBJECTIVES: This study aimed to build a conceptual framework in patients with IC/PBS which is a chronic debilitating condition characterized by pelvic pain, urinary urgency, and urinary frequency. It affects around 0.7-1 million people in the US and mostly middle aged women. Diagnostic criteria developed for research are not efficient and missing 60% of all cases. Uncertainty surrounds definition, etiology, diagnosis, natural history, true prevalence, and most effective treatment(s). **METHODS:** Literature review results were used to design semi-structured telephone interviews to elicit concepts of importance for IC/PBS patients on functioning and life. Interviews were held with clinical experts and UK patients until saturation of concepts. Transcripts were analyzed thematically. **RESULTS:** Two clinical experts and 30 female patients were interviewed. IC/PBS was defined as a chronic pain syndrome that may begin as a pathologic process in the bladder in most (but not all) patients. Pain and frequency were reported as the most bothersome symptoms. Relationships, activities, energy levels, and psychological impact were reported to be the key areas of impact. 'Not being able to do what I used to', 'worry about toilet access', 'impact on work life', and 'impact on family / home life' were mentioned as having the greatest impact. A broad range of treatments was reported with a broad range of treatment side effects. The experts' results contributed the following: pain drives frequency and younger people report a heavier burden. **CONCLUSIONS:** The conceptual framework of this study contributes to the understanding of IC/PBS. IC/PBS has a profound and debilitating effect on all aspects of patients' lives, from preventing them to work over participating in family life and traveling to being house-bound with greatly impacted change in roles and self-perceptions, leading to feelings of being 'not-normal' causing anxiety, depression and even suicidal tendencies.

URINARY/KIDNEY DISORDERS – Health Care Use & Policy Studies

PUK17

RETROSPECTIVE STUDY OF UTILIZATION PATTERNS OF OVERACTIVE BLADDER THERAPY IN MEN IN A COMMERCIALLY INSURED POPULATION: THE EARLY US MIRABEGRON EXPERIENCE

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OBJECTIVES: The medical management of men with Lower Urinary Tract Symptoms often involves agents targeting bladder outlet obstruction (BOO) such as α -blockers or 5- α reductase inhibitors (5ARI). However, overactive bladder (OAB) symptoms may coexist with BOO. This study aims to describe the baseline characteristics of men who utilize OAB [mirabegron and antimuscarinics (AM)] therapy and sequential and combination use of various urologic medication classes. **METHODS:** Data from a US commercial database were analyzed for men starting OAB therapy between 10/01/12 and 12/31/13. Men were grouped by initiation of mirabegron or AM. A 12-month retrospective analysis was conducted with patients defined as naive or experienced to AM therapy 12-month period prior to index. Baseline demographics and comorbid conditions were compared. Concomitant BOO medications, in use at baseline, initiated, or discontinued during the 90 days pre/post index date of mirabegron or AM, were analyzed. **RESULTS:** More men on mirabegron saw a urologist (75% vs 35%), more likely to have BOO diagnosed (66% vs 49%) and use in free combination with α -blockers (26% vs 17%) and 5ARI (7% vs 4%) therapy versus AM. Baseline characteristics showed mirabegron patients were older (64 vs 59) and had a higher Elixhauser comorbidity index (4.7 vs 4.0) compared with AM patients. Baseline health resource utilization (HRU) was higher among the mirabegron cohort for urodynamic (58% vs 29%), cystoscopy (25% vs 19%), polypharmacy (10.4 vs. 8.2) and overall outpatient visits (11.4 vs 8.5). More mirabegron patients had prior prostate (7.6% vs 5.8%) and OAB (3.9% vs 0.7%) surgical therapy 12-months prior to index compared to AM patients. **CONCLUSIONS:** Male patients receiving mirabegron showed distinct baseline characteristics. Patients managed by urologists were often more complicated with greater baseline HRU. Additional studies to model the impact of patient characteristics on outcomes in those prescribed mirabegron and AMs may be helpful.

PUK18

LACK OF ADHERENCE TO IMMUNOSUPPRESSIVE TREATMENT IN KIDNEY TRANSPLANT PATIENTS: ESTIMATION OF ASSOCIATED HEALTH RESOURCE UTILIZATION

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OBJECTIVES: The Lack of Adherence to Immunosuppressive Treatment (LAIT) has been associated with Chronic Humoral Rejection (CHR) and decreased graft survival which can increase Health Resource Utilisation (HRU). Prevalence of LAIT has been reported to range between 7.4% and 41.8% of Spanish Kidney Transplant (KT) patients and published studies suggest LAIT may cause up to 20-50% of CHR episodes in Spain. The objective of this study was to estimate the resource utilization associated with LAIT in KT patients in Spain. **METHODS:** A systematic literature review was conducted using Medline, PsycINFO and BVS to identify Spanish studies published between 2009 and 2013 focusing on KT and LAIT. Following the review a questionnaire was developed to explore HRU associated with LAIT. Six national experts in KT from Spain completed the survey and the data was analyzed using Computer Assisted Qualitative Data Analysis (CAQDAS). HRU was estimated independently for suspected LAIT, suspected CHR, confirmed CHR and graft loss. **RESULTS:** Suspected LAIT and CHR were associated with additional HRU quantified by additional nephrologist visits, heightened immunosuppressive blood-level monitoring, and 2 measurements of anti-HLA antibodies (Luminex), 1 ultrasound scan and 1 kidney biopsy. Confirmed CHR was associated with additional HRU such as increases in the number of follow-up visits from 1 visit every 4-6 months to 1 visit every 1-2 months, associated monitoring and testing (bloods, ultrasonography, donor-specific antibodies, proteinuria). A proportion of these patients are treated with intravenous immunoglobulin, rituximab and plasmapheresis, and kidney biopsy to check whether CHR is resolved. Finally, most CHR episodes, up to 60%, cause graft loss with increased HRU associated with intensive patients' follow-up to prepare the return to dialysis and renal replacement therapy. **CONCLUSIONS:** The lack of adherence to immunosuppressive treatment may lead to CHR and graft loss with an associated increase of healthcare resource utilization.

PUK19

COMPARATIVE EVALUATION OF PCR-RFLP OF SSU RNA AND COWP GENE FOR DETECTION OF CRYPTOSPORIDIUM SPECIES IN PATIENTS WITH POST RENAL TRANSPLANT DIARRHOEA

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OBJECTIVES: To study the utility of SSU rRNA and COWP gene PCR-RFLP for the detection of *C. parvum*, *C. hominis*, *C. meleagridis*, and *C. andersoni*. **METHODS:** 845 stool samples from 323 patients in renal transplant (RT) recipients and 50 healthy controls between January 2006 and August 2011 were examined for Cryptosporidium by Modified acid-fast (Kinyoun's) staining technique. DNA was extracted and was subjected to PCR-RFLP for species detection in cases positive for Cryptosporidium by microscopy. **RESULTS:** Cryptosporidium was detected more commonly among the RT recipients than healthy controls (23/323, vs. 0/50, respectively; $p=0.005$). All the Cryptosporidium positive cases (23/23) were detected using the PCR-RFLP of SSU rRNA gene, 15/23 were *C. hominis* and 8/23 were *C. parvum*. Only 17/23 cases were detected by COWP genes of which 9/17 were *C. hominis* and 8/17 were *C. parvum*. By comparing the SSU & COWP gene PCR-RFLP with microscopy as the gold standard, SSU gene PCR-RFLP proved to be more sensitive & specific (100%) than COWP (sensitivity & specificity of COWP PCR-RFLP was 73.9% and 100% respectively). *C. meleagridis* and *C. andersoni* were not detected in any case. **CONCLUSIONS:** Cryptosporidiosis is a common cause of diarrhea in RT recipients. The most common species was Cryptosporidium hominis. SSU rRNA PCR-RFLP is more suitable for identification of Cryptosporidium species than COWP.

PUK20

PRIORITIZATION OF COMPARATIVE EFFECTIVENESS RESEARCH QUESTIONS BASED ON IDENTIFICATION OF THE MOST RELEVANT OUTCOMES TO IMPROVE CLINICAL PRACTICE: AN APPLICATION OF MCDA TO DIALYSIS RESEARCH PLANNING

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OBJECTIVES: To prioritize comparative effectiveness research (CER) questions to improve home dialysis practice using a multicriteria decision analysis (MCDA) framework. **METHODS:** Candidate CER questions ($n=13$) were generated and refined in PICO format by an international network of nephrologists ($n=28$) using a nominal group process. The EVIDEM framework was adapted to include 11 criteria to assess the value of these research questions to improve practice from a holistic standpoint, including the impact, context and outcomes of the CER question, feasibility of study, economics and implementation of study findings. Quality of evidence to be generated was also included as a criterion, with consideration of 13 subcriteria outlining the risk of bias and precision. First, participants were asked to weight each criterion independently of the research questions. Second, for each research question, participants assigned a score for each criterion. Average overall values of CER questions were obtained by combining weights and scores using a linear model. **RESULTS:** Participants assigned highest importance to the following criteria: Impact on patient survival and other major clinical outcomes, Unmet needs, and Feasibility of the CER question. Value of CER questions varied between 48% and 73% of maximum value on the MCDA scale. Highest value estimates ($> 70\%$) were obtained for research questions exploring the association between vascular access or dialysis selection process and mortality/morbidity. Ranking had excellent face validity for all criteria. Results of this ranking process were used to prioritize research planning for the international network of nephrologists. **CONCLUSIONS:** Holistic MCDA provides a useful tool for comparative effectiveness research to ensure prioritization of CER questions with highest benefits for improving clinical practice, as illustrated by this application for home dialysis.